

REMARKS

This application was originally filed on 1 December 2000 with twenty claims, two of which were written in independent form. Claims 7, 9, 12, and 16 were amended on 15 December 2005. Claims 1 and 12 were amended on 27 October 2005. No claims have been allowed.

Claim 1 was rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,892,851 to Nguyen ("Nguyen") in view of U.S. Patent No. 6,307,978 to Metaxas ("Metaxas").

"A person shall be entitled to a patent unless," creates an initial presumption of patentability in favor of the applicant. 35 U.S.C. § 102. "We think the precise language of 35 U.S.C. § 102 that, 'a person shall be entitled to a patent unless,' concerning novelty and unobviousness, clearly places a burden of proof on the Patent Office which requires it to produce the factual basis for its rejection of an application under sections 102 and 103, see Graham and Adams." *In re Warner*, 379 F.2d 1011, 1016 (C.C.P.A. 1967) (referencing *Graham v. John Deere Co.*, 383 U.S. 1 (1966) and *United States v. Adams*, 383 U.S. 39 (1966)). "As adapted to *ex parte* procedure, *Graham* is interpreted as continuing to place the 'burden of proof on the Patent Office which requires it to produce the factual basis for its rejection of an application under sections 102 and 103'." *In re Piasecki*, 745 F.2d 1468 (Fed. Cir. 1984) (citing *In re Warner*, 379 F.2d at 1016).

"The *prima facie* case is a procedural tool which, as used in patent examination (as by courts in general), means not only that the evidence of the prior art would reasonably allow the conclusion the examiner seeks, but also that the prior art compels such a conclusion if the applicant produces no evidence or argument to rebut it." *In re Spada*, 911 F.2d 705, 708 n.3 (Fed. Cir. 1990).

"Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or

nonobviousness, these inquiries may have relevancy.” *Graham v. Deere*, 383 U.S. 1, 17-18 (1966).

“To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). ‘All words in a claim must be considered in judging the patentability of that claim against the prior art.’ *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).” MPEP § 2143.03.

“To support the conclusion that the claimed combination is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed combination or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.” *Ex parte Clapp*, 227 U.S.P.Q. 972, 973 (Bd. Pat. App. & Inter. 1985).

The Examiner has failed to meet the duty of presenting a prima facie obviousness rejection for Claim 1.

Claim 1 recites, “said last pixel abutting a group of pixels to be processed next in said row of pixels” and “propagating a first portion of said error word for said last pixel to a pixel in said next row of pixels and a second portion of said error word for said last pixel to a pixel in said group of pixels to be processed next.”

The Examiner stated, “Nguyen does not disclose expressly that said group of pixels to be processed next, which are abutted by said last pixel, are in said row of pixels.” The applicant submits that, not only does Nguyen not expressly teach the limitations of Claim 1, Nguyen expressly teaches a cut filter that only propagates error to the next row—not to the same row (see Figure 5 and line 66 of column 3 through line 7 of column 4).

The Examiner attempts to supplant the express teachings of Nguyen by cutting and pasting independent teachings of Metaxas into Nguyen. Metaxas appears to teach, in Figures 3 and 6, an error diffusion method that processing a group of pixels in separate rows. The Examiner has failed to present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references, as required by *Clapp*, but instead merely aggregates the various teachings of Nguyen and Metaxas using the

applicant's claim as a guide.

For the reasons stated above, the Examiner has not met the burden of presenting a *prima facie* case of obviousness. Therefore, the rejection under 35 U.S.C. § 103(a) is defective and should be withdrawn.

Claim 12 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Nguyen in view of Metaxas, and U.S. Patent No. 6,307,978 to Delabastita ("Delabastita"). The applicant respectfully disagrees.

For the reasons given above with respect to Claim 1, the Examiner has failed to present a *prima facie* case of obviousness of the limitations of Claim 1 with respect to Nguyen in view of Metaxas, much less of the limitations of Claim 12 with respect to the limitations of Nguyen in view of Metaxas and further in view of Delabastita. Specifically, the Examiner has failed to show how one of ordinary skill in the art would have been motivated by the prior art to combine the independent teachings of the references to obtain the limitations recited by Claim 12.

As the Examiner has not met the burden of presenting a *prima facie* case of obviousness with respect to Claim 12, the rejection under 35 U.S.C. § 103(a) is defective and should be withdrawn.

Claims 2-11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nguyen in view of Metaxas, and U.S. Patent No. 5,880,857 to Shiao ("Shiao"). The applicant respectfully disagrees. Claims 13-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nguyen in view of Metaxas, in further view of Shiao, and in further view of Delabastita. The applicant respectfully disagrees.

Examiner has failed to show how one of ordinary skill in the art would have been motivated by the prior art to combine the independent teachings of Shiao with the teachings of Nguyen, Metaxas, and Delabastita, much less the motivation to combine the references to obtain the limitations recited by the pending claims.

For the reasons given above with respect to Claims 1 and 12, the Examiner has failed to present a *prima facie* case of obviousness of the limitations of Claims 1 and 12 with respect to Nguyen in view of Metaxas, much less of the limitations of Claim 2-11 and 13-20 with respect to the limitations of Nguyen in view of Metaxas in view of Shiao and further in view of Delabastita.

Specifically, the Examiner has failed to show how one of ordinary skill in the art would have been motivated by the prior art to combine the independent teachings of the references to obtain the limitations recited by Claims 2-11 and 13-20.

As the Examiner has not met the burden of presenting a prima facie case of obviousness with respect to Claims 2-11 and 13-20, the rejection under 35 U.S.C. § 103(a) is defective and should be withdrawn.

Claim 2 recites, "subtracting said pseudo random number from said first portion to produce a first modified error word" and "adding said pseudo random number to said second portion to produce a second modified error word." Claims 5, 6, 9, and 13-15 also recite steps of adding and subtracting.

With respect to Claim 2, the Examiner stated, "The addition of a negative pseudo-random number is the same as the subtraction of a positive pseudo-random number of the same magnitude."

The Examiner is ignoring the limitations of the claims. Claim 2 doesn't recite adding or subtracting a random number, but rather "subtracting said pseudo random number from said first portion to produce a first modified error word" and "adding said pseudo random number to said second portion to produce a second modified error word" (emphasis added). The Examiner has not met the burden of presenting a prima facie case of obviousness with respect to these limitations.

Newly added Claims 21 and 22 are similar to Claims 1 and 2 and should be deemed allowable for similar reasons.

In view of the amendments and the remarks presented herewith, it is believed that the claims currently in the application accord with the requirements of 35 U.S.C. § 112 and are allowable over the prior art of record. Therefore, it is urged that the pending claims are in condition for allowance. Reconsideration of the present application is respectfully requested.

Respectfully submitted,



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